

**PERSISTENT LINK FOR BROADBAND MOBILE PLATFORM
COMMUNICATIONS SYSTEMS USING PROXY SERVERS**

ABSTRACT OF THE DISCLOSURE

A communications system according to the invention provides a communications link between a distributed communications system and a mobile platform via a satellite. The communications system includes a ground station and a parent proxy server connected to the ground station. A distributed communications system is connected to the parent proxy server.

A satellite communicates with the ground station. A transceiver, a router and a child proxy server are located on the mobile platform. A user communication device (UCD) is connected to the child proxy server. The child and parent proxy servers establish a persistent transmission control protocol (TCP) link between the mobile platform and the ground station. The UCD connects to the child proxy server using a first group of TCP settings. The child and parent proxy servers communicate using a second group of TCP settings to optimize the TCP link for long delay satellite links.